

Water Use Efficiency Program
Application for Grant
February 15, 2001
URBAN PROJECT

Energy Production and Conservation
Visitor Center at the
Historic Folsom Powerhouse

Principal Applicant:
California Department of Parks and Recreation
Gold Fields District

Contact
Shana Avalos, District Interpretive Specialist

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Funds requested
One million one hundred seventy six thousand three hundred fifty (\$ 1,176,350)
Cost share funds
Total project cost 3,638,000
For public conservation/education center
Duration
July 2001 – July 2004

Assembly District 5, Dave Cox
Senate District 6, Deborah Ortiz
Congressional District 4, John Doolittle

Boundaries
Physical boundaries are within the New Visitor Center that will be build adjacent to the Historic Powerhouse site. In Sacramento County within Folsom City limits boundaries are Lake Natoma and Greenback Lane.

Name and signature of official representing applicant. By signing below, the applicant declares the following:
--The truthfulness of all representations in the proposal
--The individual signing the form is authorized to submit the application on behalf of the applicant
--The applicant will comply with contract terms and conditions identified in Section 11 of this PSP.

Jacqueline Ball, District Superintendent,
Gold Fields District

February 15, 2001

Scope of Work

1. Abstract (Executive Summary)

The new Folsom Powerhouse Energy and Conservation Visitor Center will Highlight the Historic Folsom Hydroelectric Powerhouse (1895-1952), the first of its kind in the United States, with an emphasis on energy production and power and water conservation. The objectives of the visitor center include a strong conservation theme designed to educate the public about water and energy conservation. The water and energy educational exhibits and programs (the grant-funding request portion of the project) in the visitor center will be aimed at approximately 25,000 school children and 20,000 adults who are expected to tour the facility annually. The visitor center will also include a strong outreach conservation educational program based on its exhibits and in-house programs.

2. Statement of Critical Issues

The project, supported and being primarily funded by the California Dept of Parks and Recreation, with additional project funding and support from SMUD and the Bureau of Reclamation, is seen as the missing link in a much-needed conservation education program for the greater Folsom Area. It is expected the primary users of the facility will be adults, and especially school children, from the tri-county area (Sacramento, Placer and El Dorado). The project meets the needs expressed in the Folsom Powerhouse Area Development Plan that calls for a visitor's orientation center for educating the public on energy production. At Folsom, energy production is tied directly to having an adequate water supply for hydroelectric generation, and a strong, continual effort toward better conservation of both energy and water use. The project is also consistent with SMUD, Bureau of Reclamation, and the City of Folsom's desire for providing water and energy educational programming.

Projected population growth for both Placer and El Dorado counties is estimated to be about 60 percent increases during the next 20 years, far ahead of the state as a whole. Sacramento is expected to increase its population by about 37 percent during that same period. Such population increases will require a much increased effort at educating the public about the critical need for conservation. The visitor center's exhibits and programs will provide a critical link in the area's future conservation education efforts.

3. Nature, Scope and Objectives

The nature of this project is to provide educational and interpretive information and programs related to conservation of water/energy. The objective is to provide methods, ideas and techniques that make conservation both important and easily accomplished.

The scope of the interpretive story in this new facility will include:

- ◆ early production of power (demonstrated by the powerhouse),
- ◆ use of the river to produce electric power (hydropower),
- ◆ use and future use of water Statewide in hydro electric production
- ◆ transmission of power,
- ◆ growing population and our dependence on electricity
- ◆ alternative energy sources and environmental impacts
- ◆ conservation strategies for the future

4. Methods, Procedures and Facilities

Staff will track the numbers of visitors to the center and its conservation exhibits, including the numbers and grades of school children who participate in educational programs and utilize the interpretive displays. The programs, including the exhibits, will be regularly evaluated for their effectiveness in continuing to deliver a strong conservation message to the public.

Identifying changes in behavior and new resource conservation habits are the evaluation objectives. A follow-up survey to will be mailed to determine if there are changes in conservation behavior. The museum collaborative is currently studying learning processes for visitors and the techniques and suggestions developed by the collaborative will be used to follow up learning and behavioral changes. In addition, California State Parks has a visitor survey that is institutionalized that determines the visitor's level of satisfaction with the park/museum experience.

5. Schedule

Project	01 / 02	02/03	03/04	04/05
Exhibit design, construction	xxx\$250,000xx			xxx\$581,000x
Architectural efficiently designed	xx\$792,000xxxxxxxx			
Energy/water cons. education film		xxxx\$150,000xx		
Outreach ed.program/public.dev.		xxx\$125,000xxx		
Building Construction		xxxxxxxx\$1,188,000xxxxxxxx		

6. Monitoring and Assessment

Two primary monitoring programs will be established. The first will fall under the direction of the project manager for the grant-funded portion of the visitor center construction project. The project manager will work closely with the exhibit staff for the design, construction and installation of the conservation exhibits and building. The second monitoring program will track the quantity and effectiveness of the exhibits in transmitting the conservation education message to the public.

letter

C. Outreach, Community Involvement, and Information Transfer

1. Outreach Efforts

There will be two primary outreach efforts. The first will be conservation education programs that are thematically linked with the visitor center conservation exhibits. The in-house visitor center conservation education programs will be provided to school children through the tri-county area, which includes disadvantaged communities located primarily within the Sacramento metropolitan area (population approx. 1.4 million).

The second outreach effort will be for volunteers who will be trained as docents for providing both in-house and outreach conservation educational programming. It is anticipated that from 50 to 100 volunteers, often active and influential community members will serve on the volunteer staff.

2. Training Employment, and Capacity Building Potential.

The conservation educational programs should reach a minimum of 50,000 people annually the first year, with that number increasing from 10 to 20 percent annually as the volunteer staffing is increased and the conservation program availability becomes more widely known, especially in schools.

3. An annual report will be completed that will include the numbers of visitors (students and adults), names of schools participating, numbers of volunteer hours given, and the overall public evaluation of the educational programs. The information will be disseminated to the media and made available in the report that will be sent to all interested parties.

D. Qualification of the Applicants, and Establishment of Partnerships

State Parks

Project manager is Jim Jackson, senior architect

District Superintendent, Jacqueline Ball

Interpretive project manager is Shana Avalos, Interpretive Specialist

Sacramento Municipal Utilities District

Board of Directors, member, Susan Patterson is on the Friends of the Folsom Powerhouse Board of Directors and is supportive of this project.

New construction supervisor, Rick Wiesner, will be overseeing the building design to assure that all the latest most energy efficient materials are used in construction and that the building itself is an exhibit demonstrating energy conservation.

Bureau of Reclamation

Pete Vonich, Natural Resource Specialist, has actively supported the American River Water Education Center and supports this center by requesting funds and participating in preliminary meetings.

Debbie Coleman, has participated in the meetings and is seeking bureau funding and further participation.

Local Schools

To be contacted to work with interpretive design team to design programs and exhibits that are aligned with the school's curriculum.

City of Folsom

As yet has not participated in meetings, but is interested and supportive of a new visitor center within their city limits.

E. Costs and Benefits*

1. Budget summary

	Grant %	request	total expense
Exhibit design, construction	85%	\$703,350	831,000
Architectural efficiently designed	25%	\$198,000	792,000
Energy/water cons. education film	100%	\$150,000	150,000
Outreach ed.program/public.dev.	100%	\$125,000	125,000
Buildings	0%		396,000
Site	0%		260,000
Utilities	0%		120,000
Agency Retained costs	0%		964,650
TOTAL		\$1,176,350	3,638,000

• Appendix A Folsom Powerhouse visitor center Capital Outlay Cost Estimate

2. Justification

Costs are based on Capitol Outlay budget estimates. The final cost projections exceeded the original funding appropriated from Proposition 12 (Parks Bond Act). In order to keep the original scope of this project viable additional funding and partners have been secured. There remains an additional 1.2 million dollar shortfall, which this grant proposal fund.

3. Benefit Summary and Breakdown

This project will provide a new visitor center at the Folsom Powerhouse State Historic Park. This center will provide opportunities for conservation education, which is currently not available in the tri-counties area. The center will focus on educating the public on ways to conserve water and energy in their homes and businesses. The center will build stewardship among California's youth for the State's limited resources.

4. Assessment of Costs and Benefits

The cost estimates are based on professional experience for visitor center and exhibit design and construction. The intangible conservation benefits will be based on visitation and follow up surveys to identify the actual conservation behavioral changes that occurred.

**DEPARTMENT OF PARKS AND RECREATION
PARK DESIGN AND CONSTRUCTION
DIVISION
CAPITAL OUTLAY COST ESTIMATE**

UNIT: FOLSOM POWERHOUSE SHP
VISITOR CENTER

DATE: 12/22/2000 **PROJECT:** NEW
BY: OBK

DESCRIPTION

This conceptual estimate is for the construction of a new Visitor Center for the Folsom Powerhouse SHP. The proposed facility would be a two-story construction and consist of approximately 7,500 square feet housing a lobby/entrance, interpretive exhibit space, gift shop, meeting/lecture room, public and staff restrooms, artifact/equipment storage, workshop and a small kitchen/utility space. Site improvements, landscaping, additional parking and walkways will be included, as well as, connections to various utilities.

ESTIMATE SUMMARY

BUILDINGS:

Architectural	792,000	HVAC/Environmental Control	
144,000 Plumbing/Fire Protection			108,000
Electrical/Security	<u>144,000</u>		
Subtotal, Buildings		1,188,000	

SITE-

Landscaping	160,000	
Parking Walkways, Stairs, Ramps		88,000
Signage	<u>12,000-</u>	
Subtotal, Site		260,000

UTILITIES:

Site Utilities	-	<u>120,000-</u>
Subtotal, Utilities		<u>120,000</u>

ESTIMATED TOTAL CURRENT COSTS ON NOVEMBER 1, 2000 (CCCI 3861)

1,568,000 Adjust CCCI from 3861 TO 4019	<u>64,200</u>
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ESTIMATED TOTAL CURRENT COSTS ON JULY 1, 2001 1,632,200

Escalation to Midpoint 5 months 0.25%/mo	<u>20,400</u>
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ESTIMATED TOTAL CONTRACTS 1,652,600 Contingency @ 5%

82,630

ESTIMATED TOTAL CONSTRUCTION COST 1,735,230

ARCHITECTURAL AND ENGINEERING SERVICES 307,100 **OTHER**

PROJECT COSTS 172,680 **ESTIMATED TOTAL**

CONTRACTING AGENCY COSTS 2,215,010 **AGENCY RETAINED**

ITEMS 964,650 **ESTIMATED TOTAL PROJECT COST**

3,179,660